

Remarks

This Amendment is filed in response to the Office Action mailed February 22, 2006. A response to the Office Action was due May 22, 2006. A petition for a 1-month extension of time and the requisite fees accompanies this amendment, so that a response is due June 22, 2006. Accordingly, this amendment is being timely filed.

Status of the Claims

Claims 1 – 4, 24 – 31 and 45 – 59 are pending. Claims 1 – 4, 24 – 31 and 45 – 48 are allowed. Claims 49 – 59 are rejected.

Claims 54 and 55 have been amended to depend directly from claim 49.

Claim 49 has also been amended to recite “*means for passing a least a portion of the waste stream between the electrodes to contact at least a portion of the oxyhydrogen-rich gas and other oxidizing compounds produced near the electrodes to disinfect the waste stream*” and to recite that “*the other oxidizing compounds include at least hydroxide radicals*”.

Support for the reference to hydroxide radicals may be found in paragraph 41, second sentence.

Support for passing the waste stream between the electrodes is found in paragraph 30, specifically: “*...unit process 206 comprises an oxyhydrogen gas generator 207 (GGI) interposed in a flow path 208 between an inlet 210 and an outlet 212 of waste treatment system 204...*”

Additional support for passing the waste stream between the electrodes is found in paragraph 45, specifically: “*Operation of oxyhydrogen gas generator GG4 creates, within a vessel or **flow-through** processing zone...*”

Finally it is stated in paragraph 51: “*The oxyhydrogen-rich gas collects in the interaction zone to form bubbles that **rise through the fluid suspension between the plates...***”.

No new matter has been added by way of these amendments.

Allowance of Claims 1 – 4, 24 – 31 and 45 – 48

Applicants note the allowance of claims 1 – 4, 24 – 31 and 45 – 48.

Claim Rejections under 35 USC 112

Applicants respectfully traverse the rejection of claim 51 under 35 USC 112, second paragraph, as being indefinite. With regard to antecedent basis for “the water component”, Applicants point out that the antecedent is provided in the first two lines of claim 51, which recite “a water component”.

Claim Rejections under 35 USC 102 and possibly 35 USC 103

Claims 49 – 50, 52, 53, 57 – 59 are rejected under 35 USC 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Chambers (US 2002/0179453).

Claim 49 as amended recites “*means for passing a least a portion of the waste stream between the electrodes to contact at least a portion of the oxyhydrogen-rich gas and other oxidizing compounds produced near the electrodes to disinfect the waste stream*” and that “*the other oxidizing compounds include at least hydroxide radicals*”.

In essence the potential applications listed in Chambers arise from combining the liberated gases after they leave the liquid. There is no mention of any kind in Chambers of treatment or passing of a liquid through an interaction zone between the plates. Accordingly, Chambers does not disclose, teach or suggest claim 49 as amended. Claims 50, 52, 54 and 57 – 59 are dependent from claim 49 and include all the limitations of the independent claim. Accordingly, Chambers does not disclose, teach or suggest claims 50, 52, 54 and 57 – 59.

Claim Rejections under 35 USC 103

Claims 51 and 54 – 56 are rejected under 35 USC 103(a) as being unpatentable over Chambers.

Regarding claim 51, the Examiner has proposed to modify the system of Chambers in light of the teaching of Gehring (US 3,562,137). We note that Gehring recites in claim 12(g) that a membrane is utilized between cathode and anode to allow ions to pass through while keeping hydrogen and oxygen gases separate. In addition Gehring applies a DC voltage between anode and cathode, Chambers has neither of these key features. In particular Chambers requires a pulsed waveform to operate. Further in claim 12(k) an air flotation stage is required, there is no

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Filed: November 19, 2003
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such stage in Chambers. Thus the applicants submit that the Gehring and Chambers operate in significantly different ways that do not lead a person skilled in the art to combine features.

Regarding claims 54 – 55, the Examiner has proposed to modify the system of Chambers in light of the teaching of Wesley (US 3,829,368). We note that Wesley in claim 19 and throughout the disclosure refers to “pressurized electrolytic units”. If the system of Chambers were to be operated under the pressures indicated in the disclosure, it would explode. As this is an important feature of Wesley we consider combining Wesley with Chambers to result in a combination that is not functional.

Regarding claim 56, the Examiner has stated that “it is conventional in the art to separate the gas into oxygen-rich and hydrogen-rich gases in order to, for example, utilize each gas for specific purposes”. Applicants submit that although this may be conventional in producing oxyhydrogen gas from **water treated with electrolytes**, it is not convention in the art of treating **a waste stream**.

Accordingly, applicants submit that a *prima facie* case of obviousness for claims 51 and 54 – 55 has not been established.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Respectfully submitted,

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Dated: June 21, 2006
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